

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***PERMIT STATEMENT OF BASIS***

FINAL

Title V, Construction / Operating

Permit: V-05-014R1

PUBLISHERS PRINTING COMPANY-LEBANON JUNCTION FACILITY

LEBANON JUNCTION, KY

04/25/08

Yelena Goldin, Reviewer

SOURCE I.D. # 021-029-00032

SOURCE AI # 470

ACTIVITY # APE20080001

**MINOR PERMIT REVISION - V-05-014R1:**

The source is proposing to add one press EP # 16 (Press 418) and removed one press (Press 405) with the minor revision of their Title V permit (V-05-014R1). The revision was deemed to be minor since the company is replacing one press with another, equivalent in design and operation and under already existing control equipment (95% efficiency RTO). The uncontrolled VOC potential to emit is 136.66 tons per year; the controlled PTE for VOC is 9.36 tons per year. Therefore, the allowable for the new press is 10 tpy. Overall, the source will remain a total of 11 presses.

**U.S. EPA REVIEW:**

The U.S. EPA was notified of the issuance of the proposed permit revision on April 29, 2008 via e-mail. The comment period expired 45 days from the date of the e-mail. No comments were received during this period. The permit is now being issued final.

**SOURCE DESCRIPTION:**

Publishers Printing Company is an offset lithographic paper printing plant, which prints magazines. Printing takes place on 11 existing offset lithographic presses each with a natural gas fired dryer and propane as a back up fuel. Insignificant activities consist of the two 30,000 gallon propane tank, nine natural gas/propane space heaters, six chillers with cooling towers, five ink jet head cleaning stations, five hot melt magazine binding gluers, maintenance activities of the presses which consist of surface preparation for maintenance painting and a maintenance paint spray booth, a scrap paper collection system, two natural gas fired boilers with propane as backup, four hot water heaters for comfort heating, and a cold solvent cleaner using mineral spirits as the cleaning agent.

The presses are not subject to a process specific regulation. However, the VOC emissions from Presses EP 8 (409), EP 9 (411), and EP 7 (410) have synthetic minor limits to preclude PSD review based on earlier determinations. The portion of Bullitt County where the plant is located was designated as an attainment for ozone end of May 2008.

## COMMENTS:

### 1. Type of Control and Efficiency:

#### **EP 14(EP1) Thermal Oxidizer**

(Interlock MEGTEC System Cleanswitch CS-300-95-HT)

Maximum rate capacity of the burner: 3.46 MMBtu/hr (Natural Gas)

Secondary Fuel: Propane

Destruction Efficiency: 95% (Tested on September 28, 2004)

The thermal Oxidizer controls the emission from EP1 (Press 402), EP 2 (Press 401), EP 3 (Press 404), EP 4 (Press 406), EP 6(Press 407) EP 7(Press 411), EP 8(Press 409), EP 9 (Press 410), EP 10 (Press 412), a EP 13 (Press 416), and proposed EP 16 (Press 418).

#### **EP 15 (EP2) Catalytic Oxidizer**

(Magnum 8000 Meg TEC System)

Maximum rate capacity of the burner: 4.0 MMBtu/hr (Natural Gas)

Secondary Fuel Propane

Destruction Efficiency: 95% (Tested on September 28, 2004)

The catalytic Oxidizer controls the emission from EP11 (Press 414), and EP 12 (Press 415).

### 2. Emission factors and their Source:

Emissions from the offset lithographic presses were calculated using the EPA document "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing". Emissions from the dryers/Thermal Oxidizer/Catalytic Oxidizer were calculated using AP42.

### 3 Applicable regulations:

**401 KAR 50:012**, General application.

### 4. Precluded Regulations:

**401 KAR 51:017**, Prevention of significant deterioration of air quality.

## EMISSIONS AND OPERATING CAPS DESCRIPTION:

1. VOC emissions from EP 8 (Press 409) shall not exceed equal or exceed 36 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
2. VOC emissions from EP 9 (Press 410) shall not equal or exceed 20 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
3. VOC emissions from Press EP 7 (411) shall not equal or exceed 20 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
4. VOC emissions from Press EP 13 (416) shall not equal or exceed 10 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:052, Review of new sources in or impacting upon non attainment areas.
5. The RAP (reasonable, available, and practical) control equipments requirement required under 401 KAR 50:012, General application for a 95% VOC destruction

- efficiency by the thermal oxidizer controlling each press' dryer exhaust.
- 6 The RAP (reasonable, available, and practical) control equipment required under 401 KAR 50:012, General application for Press 414 and 415 is a 95% VOC destruction efficiency by the catalytic oxidizer controlling each press' dryer exhaust.

**PERIODIC MONITORING:**

1. The permit requires monthly records of material usage and emissions to demonstrate compliance with the 12 month emission limitations.
2. The 95% VOC destruction efficiency by the catalytic oxidizer shall be demonstrated again during the life of the permit.
3. The 95% VOC destruction efficiency by the thermal oxidizer shall be demonstrated as per general condition G (d) (5).

**CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or record keeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.